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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/085,453

02/27/2002

Manabu Sugiura

5000-4996

1830

7590

12/29/2003

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EXAMINER

LESLIE, MICHAEL S

ART UNIT

PAPER NUMBER

3745

DATE MAILED: 12/29/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/085,453

Applicant(s)

SUGIURA ET AL.

Examiner

Michael Leslie

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) Z.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

In view of the IDS filed on 11/20/2003 and amendment filed 12/8/2003, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claim 1 is rejected under 35 U.S.C. 102(a) as being anticipated by Sugiura et al. (EP 0992682).

Sugiura et al. discloses a component of a compressor having a lubricating surface portion in a slide contact area that is formed of a copper based metal containing solid lubricant but no lead, the solid lubricant including at least one of molybdenum disulfide or graphite.

Claim 2 is rejected under 35 U.S.C. 102(a) as being anticipated by Sugiura et al. (EP 0992682).

Sugiura et al. discloses a component of a compressor having a lubricating surface portion in a slide contact area that is formed of a copper based or aluminum based metal containing solid lubricant but no lead wherein the lubricating surface portion is a film made of a copper based or aluminum based metal containing solid lubricant.

Claim 2 is rejected under 35 U.S.C. 102(a) as being anticipated by Yamada et al. (EP 1010771).

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Yamada et al. discloses a component of a compressor having a lubricating surface portion in a slide contact area that is formed of a copper based or aluminum based metal containing solid lubricant but no lead wherein the lubricating surface portion is a film made of a copper based or aluminum based metal containing solid lubricant.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al. in view of Kanayama et al. (EP 0890743).

Yamada et al. teaches the component of a compressor as described above in claim 2, but does not specifically teach the method of forming the lubricating layer on the component. Kanayama et al. teaches various well known methods of forming the lubricating film including sintering. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of forming the lubricating film on the component by forming the lubricating film by sintering as taught by Kanayama et al. for the purpose of adhering the lubricating film to the component.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiura et al. in view of Yamada et al.

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Sugiura et al. teaches the component of a compressor as described above in claim 1, but does not teach that the component is a swash plate. Yamada et al. teaches a swash plate type compressor having a swash plate (2) with a lubricating surface, a rotating shaft (1), a piston, and a shoe (3) with a lubricating surface. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Sugiura et al. by having the lubricating surface on the swash plate as taught by Yamada et al. for the purpose of providing wear resistance.


Contact Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Leslie whose telephone number is (703) 305-0055. The examiner can normally be reached on M-F 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (703) 308-1044. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9302.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0861.

ML
December 23, 2003


Michael Leslie
Patent Examiner
AU 3745


EDWARD K. LOOK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700
12/29/03